

Application No. 10/712,044
Amendment dated October 20, 2005
Reply to Office Action of July 20, 2005

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REMARKS

Status of Claims:

Claims 1-53 were pending in the application; claims 12-13, 29-42, and 45-53 are hereby cancelled without prejudice or disclaimer of subject matter contained within. Claims 1-11, 14-28, 43-44, and 54 are now pending. Each of the pending claims defines an invention that is novel and unobvious over the cited art. Favorable consideration of this case is respectfully requested.

Rejections Under 35 U.S.C. § 112, 2nd Paragraph:

Claims 3-5 and 16-18 were rejected under 35 U.S.C. § 112, 2nd Paragraph, as being indefinite in view of improper dependency.

Claims 3-5 and 16-18 are hereby amended merely to conform dependency. Moreover, Claim 17 is amended to conform its recitations to proper Markush formulation.

Claim 18 is amended to properly recite the alkoxide.

Rejection Under 35 U.S.C. § 102(b):

Claims 1, 10, 15, and 43-44 were rejected under 35 U.S.C. § 102(b) as being anticipated by Yamaguchi (JP 11-092546).

Rejection under 35 U.S.C. § 102 requires the prior art disclose each and every recitation of the claimed invention.¹ In determining anticipation, no claim recitation may be ignored.² Anticipation requires the disclosure, in a prior art reference, of each and every recitation as set forth in the claims.³ There must be no difference between the claimed invention and reference disclosure for an anticipation rejection under 35 U.S.C. § 102.⁴ The evidentiary record fails to

¹ See MPEP § 706.02.

² See *Pac-Tex, Inc. v. Amerace Corp.*, 14 USPQ2d 1871 (Fed. Cir. 1990).

³ See *Titanium Metals Corp. v. Banner*, 227 USPQ 773 (Fed. Cir. 1985); *Orthokinetix, Inc. v. Safety Travel Chairs, Inc.*, 1 USPQ2d 1081 (Fed. Cir. 1986); and *Akzo N.V. v. U.S. International Trade Commissioner*, 1 USPQ2d 1241 (Fed. Cir. 1986).

⁴ See *Scripps Clinic and Research Foundation v. Genentech, Inc.*, 18 USPQ2d 1001 (CAFC 1991) and *Studiengesellschaft Kohle GmbH v. Dart Industries*, 220 USPQ 841 (CAFC 1984).

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teach each recitation of the present invention in view of the silence of Yamaguchi regarding Michael Addition chemistry.

A claim element recited by present invention is a Michael addition polyacrylate reaction product. The Michael reaction involves formation of a carbon-carbon bond. In the case of the present invention, a carbon-carbon bond is formed the reaction of active H-bearing carbon atom (as found in β -dicarbonyl compounds) with an acrylate ester. In contradistinction, Yamaguchi forms a carbon-nitrogen bond via the reaction of an amine with an acrylate. Yamaguchi fails to teach each element of the present invention, so, as a matter of law, fails to anticipate the present invention.

Rejections Under 35 U.S.C. § 103(a):

Claims 1-11, 14-28, and 43-44 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Heidt (5,667,901) in view of Tominaga (5,218,018).

To establish *prima facie* obviousness of a claimed invention, all the claim recitations must be taught or suggested by the prior art. *In re Royka*.⁵ All words in a claim must be considered in judging the patentability of that claim against the prior art. *In re Wilson*.⁶ (MPEP § 2143.03). When evaluating the scope of a claim, every recitation in the claim must be considered. See e.g. *In re Ochiai*.⁷ (MPEP § 2144.08). The evidentiary record fails to teach each recitation of the present invention. Specifically, the references taken as a whole or severally fail to teach a Michael Addition reaction product containing pendant unsaturation.

The present invention recites a Michael Addition polyacrylate reaction product. The cure mechanism of our resins involves polymerization through the unsaturated acrylate groups. Heidt's Michael addition products contain no unsaturation. Heidt's cures appear to involve a transesterification reaction.

⁵ *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

⁶ *In re Wilson*, 424 F.2d 1382, 165 USPQ 496 (CCPA 1970).

⁷ *In re Ochiai*, 71 F.3d 1565, 37 USPQ2d 1127 (Fed. Cir. 1995).

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Tominaga does not cure the defect of Heidt. The β -dicarbonyl compound chemistry described by Tominaga has nothing to do at all with Michael Addition or photochemical reactions of the present invention. Tominaga teaches β -dicarbonyls solely to form chelates with metal compounds which are then used as catalysts for effecting cure of hydroxyl-functional compound-epoxide mixtures. Moreover, Tominaga states that the β -dicarbonyl compounds must have at least one enolizable H to enable chelation with a metal ion. The Michael addition products of our invention, while being β -dicarbonyl compounds, are completely substituted at the carbon atom between the carbonyls and do not have the enolizable hydrogen atom required by Tominaga.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 22-0185, under Order No. 20435-00145-US1 from which the undersigned is authorized to draw.

Dated: October 20, 2005

Respectfully submitted,

By 

John A. Evans

Registration No.: 44,100
CONNOLLY BOVE LODGE & HUTZ LLP
1990 M Street, N.W., Suite 800
Washington, DC 20036-3425
(202) 331-7111
(202) 293-6229 (Fax)
Attorney for Applicant